

Amendment to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. Claims 24-32 are herein canceled without prejudice.

Listing of Claims:

1. – 13. (canceled)

14. (currently amended) A method of forming an insulating film on a substrate to reduce nitride consumption during manufacture, the method comprising:

placing a substrate having a nitride layer thereon in a reaction chamber;
providing a silicon source, an oxygen source, a boron source and a phosphorous source for chemical vapor depositing a doped silicate glass layer over the nitride layer; and

prior to mixing any of the flows of the silicon, oxygen, boron ~~and~~ or phosphorous sources, stabilizing individually the flows of the silicon, oxygen, boron and phosphorous sources;

injecting the silicon source, the oxygen source and the boron source into the chamber for a predetermined period of time to form a borosilicate glass layer over the nitride layer on the substrate; and

injecting the phosphorous source into the chamber while continuing injecting the silicon, oxygen and boron sources into the chamber to deposit a borophosphosilicate glass layer over the borosilicate glass layer.

15. (original) The method of claim 14, wherein the predetermined period of time to deposit a borosilicate glass layer over the nitride layer is in a range of approximately 3-30 seconds.

16. (original) The method of claim 14, wherein the predetermined period of time to deposit a borosilicate glass layer over the nitride layer is about 10 seconds.

17. (original) The method of claim 14 further comprising annealing the borophosphosilicate glass layer at a temperature in a range of approximately 750 °C to 1050 °C in an ambient selected from the group consisting of steam ambient, water ambient and ambient formed by in-situ reaction of H₂ and O₂.

18. (currently amended) A method to control nitride consumption during integrated circuit manufacture, the method comprising:

placing a substrate having a nitride layer in a reaction chamber;

providing a silicon source, an oxygen source, a boron source and a phosphorous source;

injecting the silicon, oxygen and boron sources into the reaction chamber while

delaying injecting the phosphorous source in the reaction chamber for a

predetermined period of time to deposit a boron-rich silicate glass film over the

nitride layer, ~~the predetermined period of time selected relative to the desired~~

nitride layer consumption during a subsequent anneal, wherein the desired nitride layer consumption is at least a portion of the nitride layer; and
injecting a predetermined amount of the phosphorous source in the reaction chamber following the predetermined period of time while continuing injecting the silicon, oxygen and boron sources into the reaction chamber to deposit a borophosphosilicate film over the boron-rich silicate glass film, wherein the borophosphosilicate glass layer comprises approximately 2-9 weight percent of phosphorous; and
annealing the borophosphosilicate glass layer to consume at least a portion of the nitride layer, wherein the predetermined period of time for delaying injecting the phosphorous source and the predetermined amount of the phosphorous source are selected relative to the desired nitride layer consumption.

19. (original) The method of claim 18, wherein the predetermined period of time to deposit a boron-rich silicate glass film over the nitride layer is in a range of approximately 3-30 seconds.

20. – 22. (canceled)

23. (previously presented) The method of claim 18 wherein the desired nitride layer consumption is in the range of 15 – 20 Angstroms of the nitride layer.

24. – 32. (canceled)